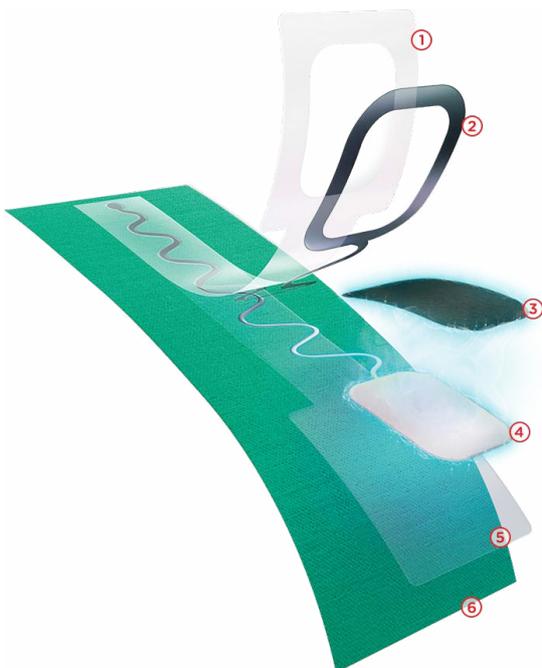


Create Higher Performance Textiles with Trusted DuPont™ Intexar™ Technology



DuPont™ Intexar™ technology integrates seamlessly into textiles for revolutionary health, fitness, and heated clothing applications. Specifically, Intexar™ inks and films transform materials into smart wearables; provide an effective way to sense and transmit biometric signals; and deliver heat. Plus, Intexar™ makes smart health devices and clothing easier to design, manufacture, and wear because the materials are:

- **Comfortable, soft, thin, and lightweight**—as well as compatible with existing high-performance fabrics and healthcare path materials
- **Manufacturing-ready**—Intexar™ materials work with standard textile lamination processes and can be cut to any shape
- **Functional**—Intexar™ maintains strong signal strength after repeated washing and can withstand up to 100 wash cycles



- 1. Cover film**
A protective layer shields the ink and film from exposure.
- 2. Encapsulant**
A thin, stretchable, and water-resistant layer.
- 3. Carbon overprint**
A thin layer of carbon or silver senses electrical currents and transmits data.
- 4. Conductor**
A layer of silver transmits electrical currents throughout.
- 5. Base film**
A Thermoplastic Polyurethane (TPU) laminate stretches for seamless integration with textiles.
- 6. Textile**
Most preferred textiles can be used.

Wearable Health Care

Manufacturer-ready, Intexar™ Health can be easily integrated into existing materials for skin patches and wearable clothing, providing smart wearable health care for use by consumers and medical professionals.

When placed directly on skin, Intexar™ can be used to detect the body's natural electrical signals for monitoring. Additionally, Intexar™ improves patient experience with peel-and-stick monitoring patches that stretch while maintaining conductivity.

Gentle on-body heating and mild electro-stimulation with Intexar™ delivers pain relief to specific areas.

Intexar™ Medical Grade Health Applications

| | |
|------------------------|--|
| Telemetry & Monitoring | <ul style="list-style-type: none"> • Vital sign monitoring: Heart rate, ECG/EKG, EMG, EEG • Pregnancy and infant monitoring • Respiratory disorders |
| Therapy | <ul style="list-style-type: none"> • Heat • Transcutaneous electrical nerve stimulation (Tens) |

Smart Fitness Clothing

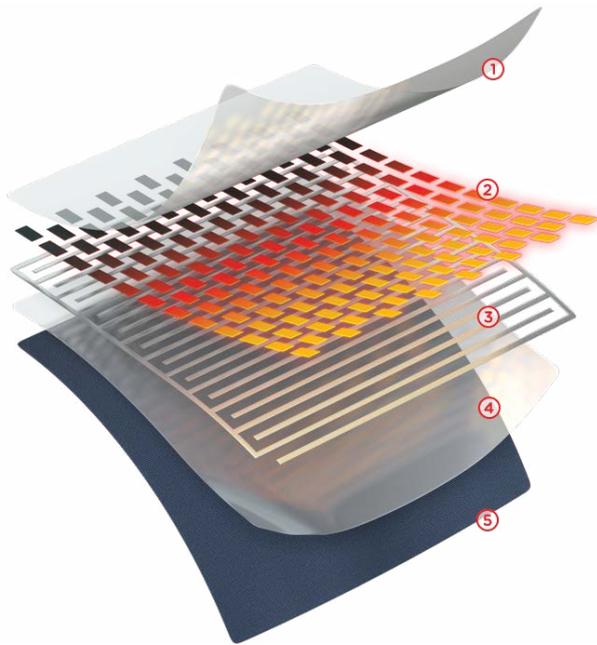
Light, stretchable, and seamless, Intexar™ Fitness is comfortable, wearable technology that enhances performance clothing. With Intexar™, athletes at all levels gain insights through biometric monitoring of pulse, breathing rate, muscle tension, and form.

Intexar™ Fitness Applications

| | |
|-----------|--|
| Athletics | <ul style="list-style-type: none"> • Professional, collegiate, amateur, and club • Indoor and outdoor |
| Training | <ul style="list-style-type: none"> • Calisthenics, weightlifting, and aerobics • Endurance • Recovery |

Power-heated Outdoor Clothing

Thin, safe, and efficient, Intexar™ Heat conquers cold environments with powered heat for outdoor smart clothing by allowing temperature control and reaching operating temperatures within 40 seconds.



Intexar™ System Product Selector

| Material | Product Number | Uses and Performance |
|-------------------------------|----------------|---|
| Silver Conductor | PE874 | Stretchable conductor for signal transfer • best stretch recovery |
| Silver Conductor | PE876 | Stretchable conductor for signal transfer • best washability |
| Base Film | TE-11C | Polyurethane film designed for stretchable printed electronics • used for base film and cover layers |
| Adhesive Film | TE-21C | Melt adhesive film designed for part packaging • used to adhere to other fabric or layers |
| Encapsulant | PE773 | Stretchable encapsulant for wearable applications |
| Carbon Resistor/ Overprint | PE671 | Biopotential sensor and overprint |
| Carbon Resistor/ Overprint | PE672 | Low PTC carbon for heater applications |

For more information about Intexar™ textile technology, contact your DuPont representative.

Intexar™ Heat Applications

| | |
|------------------------|--|
| Outdoor Enthusiasts | <ul style="list-style-type: none"> • Skiing, snowboarding, and mountain climbing • Hiking / trekking • Snowmobiling and motorcyclists • Sports fans • Hunting |
| Industry Professionals | <ul style="list-style-type: none"> • Utility, construction, and infrastructure • Military • Delivery • Forestry and mining |

1. Cover film

A plain or customized protective layer shields the ink from exposure.

2. Carbon overprint

A thin layer of carbon radiates a controlled heat.

3. Conductor

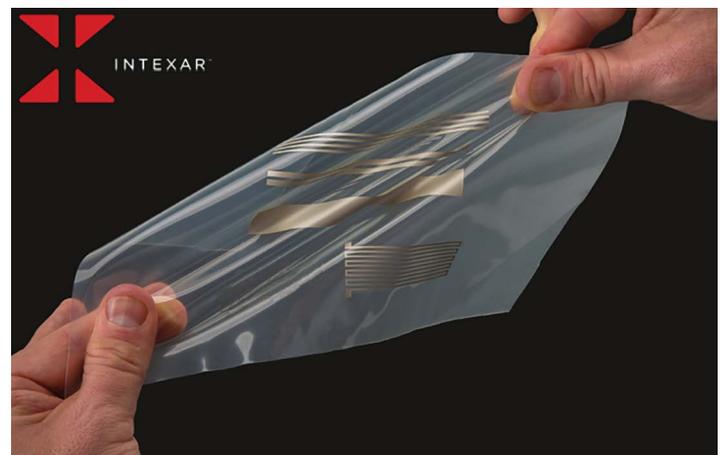
A layer of silver transmits electrical currents throughout.

4. Base film

A Thermoplastic Polyurethane (TPU) laminate stretches for seamless integration with woven materials.

5. Fabric

Any preferred woven garment material can be used.



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